

Application Serial No. 10/583,018
Reply to Office Action of July 29, 2009

PATENT
Docket: CU-4878

REMARKS

In the Office Action, dated July 29, 2009, the Examiner states that Claims 3, 5-7, 16-30, 32 and 34 are pending, Claims 3, 5-7, 16, 17, 29, 30, 32 and 34 are rejected and Claims 18-28 are withdrawn. By the present Amendment, Applicant amends the claims.

In the Office Action, Claims 3, 5, 6, 29 and 30 are rejected under 35 U.S.C. §102(b) as being anticipated by Van Tongeren et al. (US 2002/0079832). Claim 7 is rejected under 35 U.S.C. §103(a) as being unpatentable over Van Tongeren in view of Takako (JP 2002-237382). Claims 16 and 17 are rejected under 35 U.S.C. §103(a) as being unpatentable over Van Tongeren in view of Vleggaar et al. (US 6,160,346). Claims 32 and 34 are rejected under 35 U.S.C. §103(a) as being unpatentable over Van Tongeren in view of Hosokawa (US 2001/0011783). The Applicant considers that the present amendments to the claims overcome these rejections.

Independent Claim 3 has been amended to incorporate the subject matter of Claim 16. A novel aspect of amended claim 3 is considered to be that "a gap made between the organic material layer and a base material having a concave part opposite to the organic material layer is filled and formed with the metal".

(ii) Van Tongeren discloses to use a metal having a low melting point as the electrode material for the organic EL device, however, is does not disclose at all that the "gap made between the organic material layer and a base material having a concave part opposite to the organic material layer is filled and formed with the metal". Thus, the Applicant considers that amended Claim 3 is not anticipated by Van Tongeren.

In the present claimed invention, the "base material having a concave part" denotes to form the gap by arranging the base material having a pre-forming a concave part opposite to the organic material layer. Further, the organic functional element of the present claimed invention is formed by filling a metal having a low melting point to the gap. Thus, it becomes possible for the present claimed invention to have the technical constitution of comprising the "gap made between the organic material layer and a base material having a concave part opposite to the organic material layer is filled and formed with the metal" only when the present invention comprises the "base material having a concave part". Moreover, such characteristics allow the present invention to obtain an organic EL element emitting a light of higher uniformity (See page

Application Serial No. 10/583,018
Reply to Office Action of July 29, 2009

PATENT
Docket: CU-4878

27, lines 9-27, Specification).

In contrast, the coating layer 8 of Vleggaar is formed by applying a thin film of the allow having a low melting point to the bonding layer 9 and melting the thin film (column 7, lines 23-28). As such, the coating layer of Vleggaar does not have a concave part preliminarily formed, but a concave part forms as a result of forming the coating layer to the layer laminated on the organic layer. Accordingly, the coating layer cannot constitute the "gap made between the organic material layer and a base material having a concave part opposite to the organic material layer is filled and formed with the metal". Thus, the coating layer is not a technical structure equivalent to the claimed "base material having a concave part" and is a totally different member.

Column 7, lines 19-23 of Vleggaar states that "Yb is a vacuum deposited, via a mask, thereby forming a 200 nm thick negative electrodes 5" and "a [A] n approximately 200 nm thick layer of nickel and a 200 nm thick layer of silver are successively provided by means of magnetron sputtering and vapor deposition, respectively, thereby forming the bonding layer 9." Thus, both of the negative electrode 5 and the bonding layer 9 of Vleggaar cannot be the "gap made between the organic material layer and a base material having a concave part opposite to the organic material layer is filled and formed with the metal".

Therefore, US 6,160,346 does not disclose at all the characteristics claimed in the present invention.

Further, as explained above Van Tongeren is completely silent regarding an organic functional element comprising a "gap made between the organic material layer and a base material having a concave part opposite to the organic material layer is filled and formed with the metal".

Thus, both Van Togerren and Vleggaar do not disclose at all an organic functional element comprising a "gap made between the organic material layer and a base material having a concave part opposite to the organic material layer is filled and formed with the metal". Further, since Vleggaar is completely silent about the technical structure equivalent to the "base material having a concave part", the organic EL device of Vleggaar does not comprise a "gap made between the organic material layer and a base material having a concave part opposite to the organic material layer". As such,

Application Serial No. 10/583,018
Reply to Office Action of July 29, 2009

PATENT
Docket: CU-4878

even if the metal having a low melting point recited in Van Tongeren is combined with Vleggaar, the technical structure of being "filled and formed with the metal" cannot be achieved.

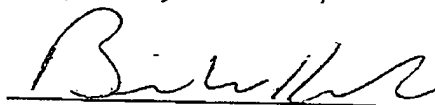
In addition, both Takako and Hosokawa are silent regarding a "gap made between the organic material layer and a base material having a concave part opposite to the organic material layer is filled and formed with the metal". In view of the above, the Applicant considers that amended Claim 3 is not obvious in view of the cited references. The dependent Claims 5-7, 17, 29, 32, and 34 are likewise considered not be anticipated by or obvious in view of the cited references.

In light of the foregoing response, all the outstanding objections and rejections are considered overcome. Applicant respectfully submits that this application should now be in condition for allowance and respectfully requests favorable consideration.

Respectfully submitted,

January 26, 2010

Date



Attorney for Applicant
Brian W. Hameder
c/o Ladas & Parry LLP
224 South Michigan Avenue
Chicago, Illinois 60604
(312) 427-1300
Reg. No. 45613